#### North Carolina Department of Transportation

#### NEPA/SEPA Consultation Form

| STIP Project No.        | B-5825    |
|-------------------------|-----------|
| WBS Element             | 45778.1.1 |
| Federal Aid Project No. | N/A       |

#### A. <u>Project Description, Location, and Purpose</u>:

The purpose of this project is to replace Bridge No. 980035 on NC 67 (Reynolda Road) over the Yadkin River in Yadkin and Forsyth Counties.

Bridge No. 980035 on NC 67 (Reynolda Road) in Yadkin and Forsyth Counties has two 10-foot to 11-foot travel lanes and is approximately 90 feet in length. The proposed replacement structure will be a 72-inch girder bridge approximately 1,067 feet in length with two 12-foot travel lanes, 4-foot offsets and bicycle safe rails. The roadway grade of the new structure will be raised from 3 feet to 6 feet.

The 72 inch corrugated metal pipe (CMP) on SR 1600 (Donnaha Road) conveying an unnamed tributary to the Yadkin River will be replaced with a single 9' x10' reinforced box culvert (RCBC). The existing single 9' x 9' RCBC on NC 67 (Reynolda Road) conveying an unnamed tributary to the Yadkin River east of Bridge No. 980035 will be retained and extended.

Construction on NC 67 (Reynolda Road) will extend approximately 1,533 feet from the west end of the new bridge and 1,402 feet from the east end of the new bridge. Approaches will be widened to provide two 12-foot travel lanes with 8-foot shoulders (11-feet with guardrail), 4 feet of which paved.

Four-foot paved shoulders and bicycle safe rails are included to accommodate bicyclists.

Construction on SR 1600 (Donnaha Road) will extend approximately 968 feet north from NC 67. SR 1600 will be realigned and widened to improve the sight distance to the west. The realignment of SR 1600 to the east will include two 12-foot travel lanes with 8-foot shoulders (11-feet with guardrail).

The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway is classified as a Minor Arterial with a 60 mile per hour design speed.

Traffic will be maintained on-site using the existing bridge and roadway alignment during construction.

| B. | B. Consultation Phase: (Check one) |                        |                                                       |  |  |
|----|------------------------------------|------------------------|-------------------------------------------------------|--|--|
|    |                                    | Right-of-Way           |                                                       |  |  |
|    | $\boxtimes$                        | Construction           |                                                       |  |  |
|    |                                    | Other: Identify th     | ne trigger – (e.g., design change, change in impacts) |  |  |
| C. | NEPA/SEPA CI                       | ass of Action Initiall | y Approved as: (Check one)                            |  |  |
|    | $\boxtimes$                        | SEPA MCDC              | 7/12/2019                                             |  |  |
|    | Additional Note                    | S:                     |                                                       |  |  |

#### Changes in Proposed Action & Environmental Consequences:

The water resources and classifications have not changed since the MCDC was completed.

As of July 17, 2020, the USFWS lists one protected species for Yadkin County and three species for Forsyth County. NCDOT is in compliance with 4(d) with regard to the northern long-eared bat (NLEB). Percussion activity information regarding the NLEB was provided to the USACE on April 13, 2020 for their SLOPES determination. No biological conclusion is required for the bog turtle. There is no habitat for small-anthered bittercress, resulting in a biological conclusion of No Effect. No species have been added to or removed from the county lists since the MCDC.

There have been no major changes to the design since the MCDC was approved.

NCDOT has reviewed the previous Section 106 effects findings for archaeological sites and historic properties within the project's area of potential effects (APE). Drawings submitted with the March 6, 2020 Section 404 permit and 401 water quality certification show the project impacts extend outside of the 2016 archaeological Area of Potential Effects (APE) survey limits. As a result, an addendum archaeological survey covering the expanded APE was completed in December 2020. Subsurface investigations revealed no presence of archaeological resources in the expanded APE. A December 2020 staff review of the State Historic Preservation Office GIS (HPOGIS) website showed three properties over 50 years of age present within the expanded study area. None of the properties are of architectural significance. No further evaluation of the properties is recommended. NCDOT staff will provide this review documentation to the Corps of Engineers for 404 permit compliance.

#### D. Conclusion:

The above NEPA/SEPA documentation has been reevaluated (as required by either 23 CFR 771 or by NC General Statute Chapter 113A Article 1). It has been determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted in Section D. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

#### E. Coordination

NCDOT personnel have discussed the current project parameters with qualified NCDOT representatives and FHWA (where applicable). The NCDOT Project Manager, Theresa Ellerby, hereby verifies the involvement of the following staff and the incorporation of their technical input:

| Design Engineer:                        |   | Tommy Register  | 11/19/20 |
|-----------------------------------------|---|-----------------|----------|
| Environmental Specialist:               |   | Bill Barrett    | 11/23/20 |
| FHWA (if applicable):                   |   | N/A             | N/A      |
| Architectural Historian:                |   | Shelby Reap     | 12/17/20 |
| Hydraulics Engineer:                    |   | Brian Radakovic | 11/17/20 |
| Construction Consultation, January 2021 | 3 |                 | v2020-03 |

#### F. Consultation Approval for NCDOT Project No. B-5825

| Prepared By:                     | DocuSigned by:                                                                                                   |
|----------------------------------|------------------------------------------------------------------------------------------------------------------|
| 1/7/2021                         | Thuresa Ellerby                                                                                                  |
| Date                             | Theresa Ellerby NCDOT, Project Management Unit                                                                   |
| Prepared For:                    | Jacquelyn Bowles, PE<br>NCDOT, Structure Management Unit                                                         |
| Reviewed By:<br>1/7/2021<br>Date | John Jamison, Team Lead NCDOT, Environmental Policy Unit                                                         |
| Appro                            | Chapter 113A Article 1 (SEPA), NCDO1 approves this Consultation.                                                 |
| Certifi                          | NCDOT staff cortifies if EHWA signature was proviously required or                                               |
| 1/7/2021  Date                   | DocuSigned by:  A4A2999A8BC64F2  David Stutts, PE – Project Engineer – PEF/Program Management                    |
| FHWA Approved                    | North Carolina Department of Transportation  : FHWA signature required for Type I(B) CE, Type II(B) CE, Type III |
|                                  | CE, FONSI or ROD.  N/A                                                                                           |
| Date                             | John F. Sullivan, III, PE, Division Administrator<br>Federal Highway Administration                              |

#### G. Project Commitments (as of January 2021)

# T.I.P Project No. B-5825 Replacement of Bridge No. 35 on NC 67 over Yadkin River Yadkin and Forsyth Counties WBS Element 45778.1.1

Current status and additions to the project commitments as shown in the MCDC for the project are printed in italics.

#### **NCDOT Hydraulics Unit**

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine the status of the project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

**Status:** Coordination resulted in approval on February 03, 2020 for the FEMA NFIP (National Flood Insurance Program) under NCDOT's MOA with the FMP.

#### **Division Construction - FEMA**

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

#### Division 11 - Donnaha Park

Donnaha Park will be closed during construction. NCDOT will maintain coordination with Yadkin County Parks and Recreation during construction.

#### Structures Management Unit – Tribal Coordination

The Structures Management Unit will continue coordination with the Catawba Indian Nation, Tribal Historic Preservation Office on comments or concerns resulting from the expanded APE. NCDOT will also provide documentation of this coordination to the Corps of Engineers for compliance with 404 permitting.

#### **COMMITMENTS FROM PERMITTING**

#### 404 Special Condition #3; Division 11 – River Safety Plan

As noted in the plan titled, "NCDOT RIVER SAFETY PLAN FOR THE CONSTRUCTION OF THE HWY 67 BRIDGE OVER THE YADKIN RIVER, B-5825", the permittee shall ensure that the contractor installs and maintains a rigid, non-drooping catchment device on the overhead structure of the bridge over the Yadkin River to prevent material from falling on river users or in the water. This structure is only required for the portion of the bridge that is over the river; it is not required for the portion over uplands (land).

#### 404 Special Condition #4; Division 11

As noted in the additional information submitted by NCDOT, the permittee shall ensure that bridge components are not allowed to be dropped. Furthermore, during the short periods of time when loads are to be lifted (e.g. girder erection), and in the event a river user is approaching the work area(s), either the girder erection will be paused or the river user will be stopped until the load is secure.

#### 404 Special Condition #5; Division 11

The permittee shall ensure that no more than 50% of the river flow is blocked at any one time.

#### 404 Special Condition #6; Division 11

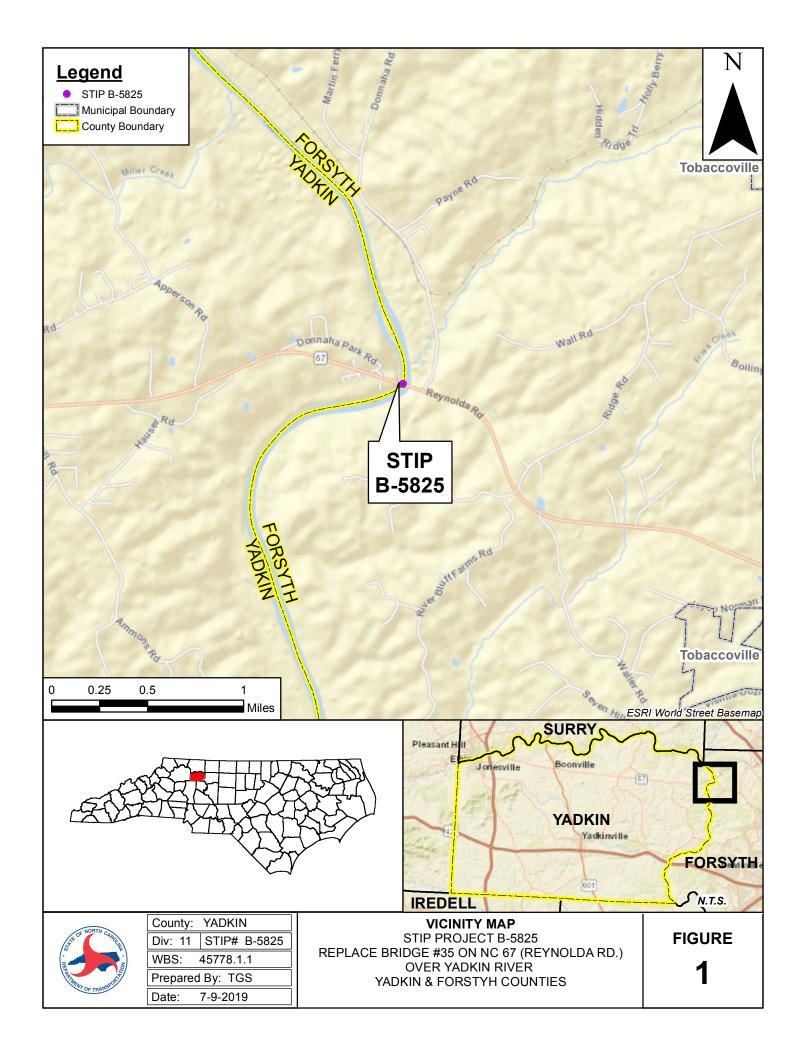
The permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, fill pads, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The Permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization by the U.S. Army Corps of Engineers.

#### 404 Special Condition #7; Division 11

The permittee shall ensure that any equipment that is placed on the causeway is removed when either of the following situations is forecasted or anticipated: (1) the water level will rise to a point where the equipment could be flooded (even during work days), and (2) the water level is expected to rise overnight, or over a non-work period of time, to a point where the equipment could be flooded.

#### 404 Special Condition #8; Division 11

Upon completion of work that requires the causeway to be in the river, the permittee shall remove all readily detectible causeway material, to the extent practicable, while removing as little of the original riverbed as possible.





## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

November 23, 2020

**MEMORANDUM TO:** Theresa T. Ellerby, CPM, Project Manager

Project Management Unit

**FROM:** William A. Barrett, Environmental Program Consultant

**Environmental Coordination and Permitting** 

**SUBJECT:** Water resources and protected species review for a Federal Highway

Administration (FHWA) Construction Consultation for the replacement of Bridge 35 on NC 67 (Reynolda Road) over Yadkin river in Yadkin and Forsyth

Counties, Division 9 and 11, TIP No. B-5825.

**REFERENCE:** - Minimum Criteria Determination Checklist (MCDC), dated July 2019

- USACE 404 RGP 50 (SAW-2020-00452), dated May 28, 2020

- NCDWR WQC No. 4135, (NCDWR Project No. 20200347), March 31, 2020

#### WATER RESOURCES

Water resources and classifications in the project area have not changed since the above referenced documents.

#### PROTECTED SPECIES

As of July 17, 2020, the USFWS lists one protected species for Yadkin County (Northern long-eared bat) and three species for Forsyth County (Northern long-eared bat, bog turtle and small anthered-bittercress). Percussion activity information, regarding the Northern long-eared bat, was provided to the USACE via email on April 13, 2020 for their SLOPES determination. No biological conclusion is required for the bog turtle. There is no habitat for small-anthered bittercress, resulting in a Biological Conclusion of No Effect. Section 7 has been resolved for this project.

#### **GREENSHEET COMMITMENTS**

The Final/Permitting Project Commitments Greensheet has been distributed to the Division and Contracts via the Environmental Permits Package found on the NCDOT Permits Website. A copy of the Greensheet has been provided with this Consultation.

If there are any additions or edits, please advise ECAP so the appropriate re-distribution can occur.

Telephone: (919) 707-6000

Customer Service: 1-877-368-4968

Website: www.ncdot.gov

ec: B-5825 file

16-01-0080 Updated

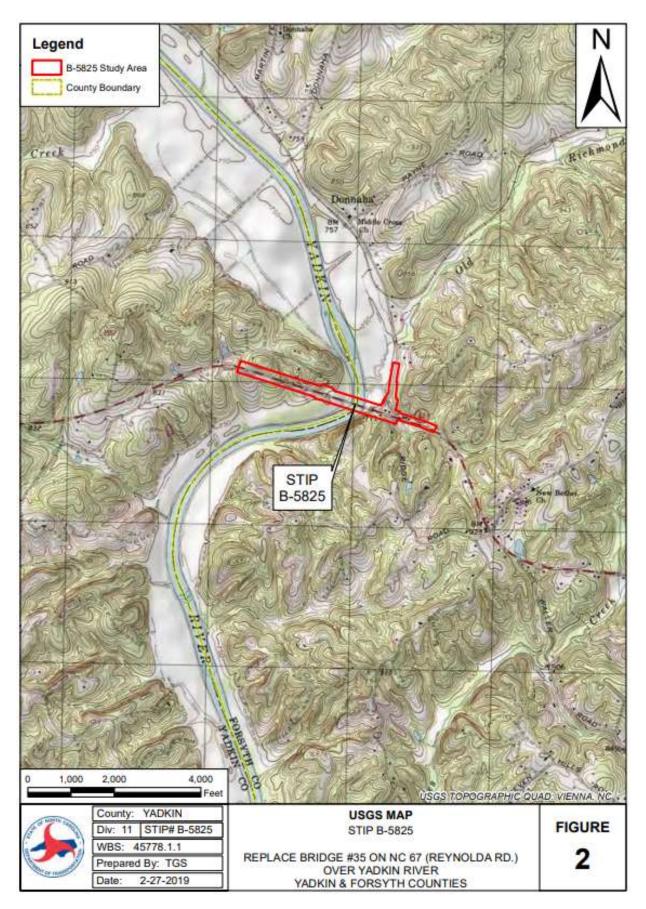


### HISTORIC ARCHITECTURE AND LANDSCAPES NO HISTORIC PROPERTIES PRESENT FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

| PROJECT INFORMATION                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                       |                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Project No:                                                                                                                                                                                                                                          | B-5825                                                                                                                                                                                                                                                | County:                                                                                                                                          | Yadkin/Forsyth                                                                                                                                                                                                                                                                                                                                                                                       |  |  |
| WBS No.:                                                                                                                                                                                                                                             | 45778.1.1                                                                                                                                                                                                                                             | Documen                                                                                                                                          | t CE                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
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| Fed. Aid No:                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                       | Funding:                                                                                                                                         | ⊠ State ☐ Federal                                                                                                                                                                                                                                                                                                                                                                                    |  |  |
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| Permit(s):                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                       | <i>Type(s)</i> :                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
| <u>Project Description</u> : Replace Bridge No. 35 on NC 67 over Yadkin River.                                                                                                                                                                       |                                                                                                                                                                                                                                                       |                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
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| Review of HPOGE<br>there are no existing<br>in 1945 and one standard thouse nor the story<br>National Register<br>County Bridge Not<br>engineering or aest<br>historic properties<br>submitted through<br>properties over 50<br>and Forsyth Tax page | ng NR, DE, LL, SL or SS pore built in 1940 are within e possess the architectural listing either individually of 67, was built in 1950, thetic type and is not eligif will be affected by this pare eTracs that includes ad years of age are present. | taken on Febroroperties in the name of a lintegrity and or as a histo. The structurable for the Name or oject. On Delditional study All 3 have a | ruary 5, 2016. Based on this review, the project area. One house constructed Potential Effects; however, neither the For distinction to meet the criteria for the does not exemplify any distinctive attional Register of Historic Places. No exember 17, 2020 a new request was by area. In the additional APE three year-built date as 1940 in the Yadkin tectural significance to warrant further |  |  |
| SUPPORT DOCUMENTATION                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                       |                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
| ⊠Map(s) □F                                                                                                                                                                                                                                           | Previous Survey Info.                                                                                                                                                                                                                                 | ⊠Photos                                                                                                                                          | Correspondence Design Plans                                                                                                                                                                                                                                                                                                                                                                          |  |  |
| FINDING BY NCDOT ARCHITECTURAL HISTORIAN                                                                                                                                                                                                             |                                                                                                                                                                                                                                                       |                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
| Historic Architectu                                                                                                                                                                                                                                  | re and Landscapes – NO H                                                                                                                                                                                                                              | ISTORIC PROP                                                                                                                                     | PERTIES PRESENT                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
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NCDOT ARCHITECURAL HISTORIAN



Historic Architecture and Landscapes NO HISTORIC PROPERTIES PRESENT OR AFFECTED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.





Property 1: c. 1940



Property 2: c. 1940



Property 3: c. 1945



Properties 4- 5: c. 1940 (same parcel)



#### NO NATIONAL REGISTER OF HISTORIC PLACES ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT FORM



This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Team.

| PROJE                                                                                                                                                                                                                                                                                                                                  | CT II                                                                                                                                                                 | NFORMATIO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| Yadkin                                                                                                                                                                                                                                                                                                                                 | <b>Project Description:</b> Replace Bridge 35 on NC 67 (Reynolda Rd.) over the Yadkin River in Yadkin and Forsyth Counties. <b>SUMMARY OF ARCHAEOLOGICAL FINDINGS</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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| (This project falls within a North Carolina County in which the following federally recognized tribes have expressed an interest: Catawba Indian Nation. We recommend that you ensure that this documentation is forwarded to these tribes using the process described in the current NCDOT Tribal Protocol and PA Procedures Manual.) |                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                              |                                                                                                             |                                                                                |                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                 |           |
| SUPPORT DOCUMENTATION                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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| Signed:                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                       | Other:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| CALEB S                                                                                                                                                                                                                                                                                                                                | SMITH                                                                                                                                                                 | I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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Date

NCDOT ARCHAEOLOGIST

# Addendum to the Archaeological Survey for the Replacement of Bridge 35 on NC 67 (Reynolda Rd.) over the Yadkin River in Yadkin and Forsyth Counties, North Carolina (NCDOT TIP B-5825; PA 16-01-0080) By Caleb Smith, Archaeologist (December 2020)

#### Introduction

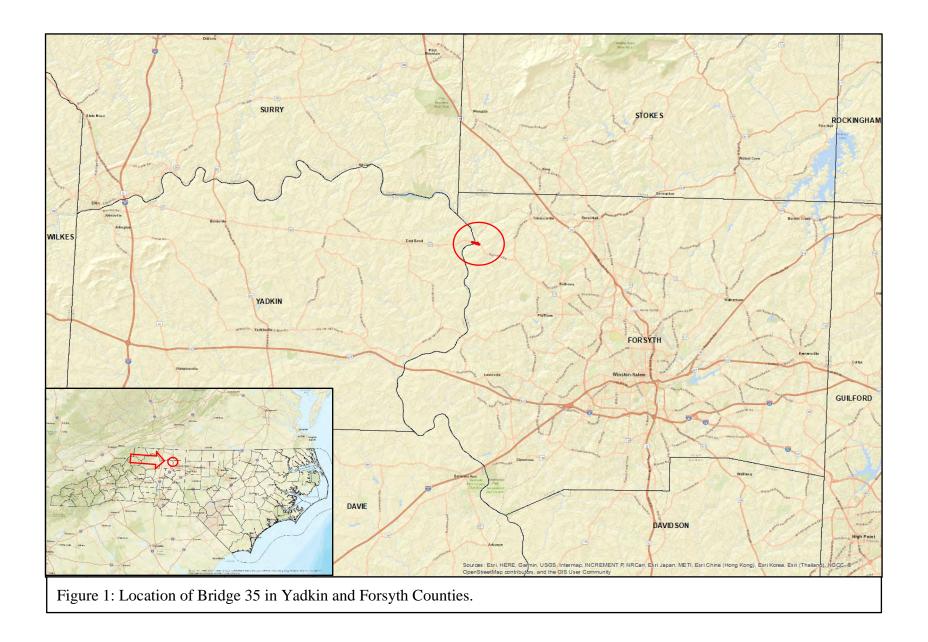
The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge 35 on NC 67 over the Yadkin River in Yadkin and Forsyth Counties (Figure 1). The project was first submitted to the Archaeology Team for cultural resources review in January 2016 (Programmatic Agreement [PA] #16-01-0080). The Area of Potential Effects (A.P.E.) of the project was approximately 620 meters (2,033 ft.) long and 75 meters (250 ft.) wide (Figure 2). It included the land within 38 meters (125 ft.) of the centerline on both sides of the road for 310 meters (1,018 ft.) in each direction from the bridge. The project was state-funded and required federal permits so the review was conducted persuant to Section 106 of the National Historic Preservation Act of 1966.

The review included an examination of a topographic map, the Yadkin and Forsyth Counties soil surveys, an aerial photograph, and listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (O.S.A.). Also, a visual examination of the A.P.E. was conducted on 2/24/2016. It identified several landforms within the A.P.E. with potential for prehistoric archaeological sites, and an *Archaeological Survey Required* form was submitted on 3/11/2016 (Smith 2016). Archeological survey was recommended for the northeast, northwest and southwest quadrants.

The archaeological survey was conducted by Archaeological Consultants of the Carolinas, Inc. (ACC) on 11/14/2016 (Brilliant 2017). The survey consisted of the examination of 39 shovel test locations along transects located approximately 15 meters (50 ft.) from the pavement edge in each of the four quadrants (Figure 3). The survey did not identify any archaeological sites, and a *No National Register of Historic Places (NRHP)-Eligible Sites Present* form was submitted on 1/4/2017 (Smith 2017). The results of the archaeological review were included in the *Minimum Criteria Determination Checklist* submitted in July 2019.

#### **December 2020 Review**

The drawings submitted with the 3/6/2020 Section 404 regional general permit and the 401 water quality certification show drainage control structures will be located slightly outside of the 2016 archaeological A.P.E. (Figures 4-5). The impacts extend outside of the surveyed area in the northwest and northeast quadrants. The impacts in the northwest quadrant are on a landform with little potential for archaeological sites and no archaeological survey is recommended there. The impacts in the northeast quadrant are on a landform with a moderate to high potential for archaeological sites so additional survey was recommended there in December 2020.



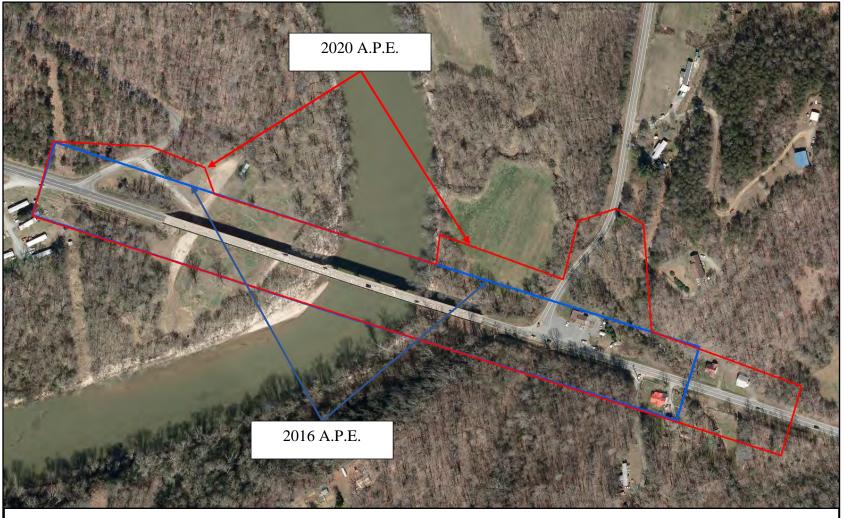


Figure 2: Aerial photograph showing the 2016 (blue) and 2020 (red) Areas of Potential Effects.

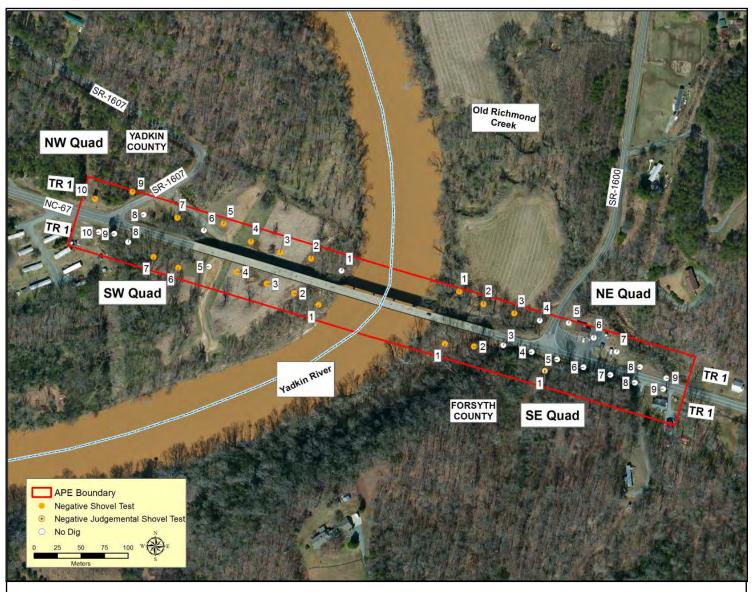


Figure 3: Aerial photograph showing the 2016 archaeological survey limits (Brilliant 2017: Figure 3)

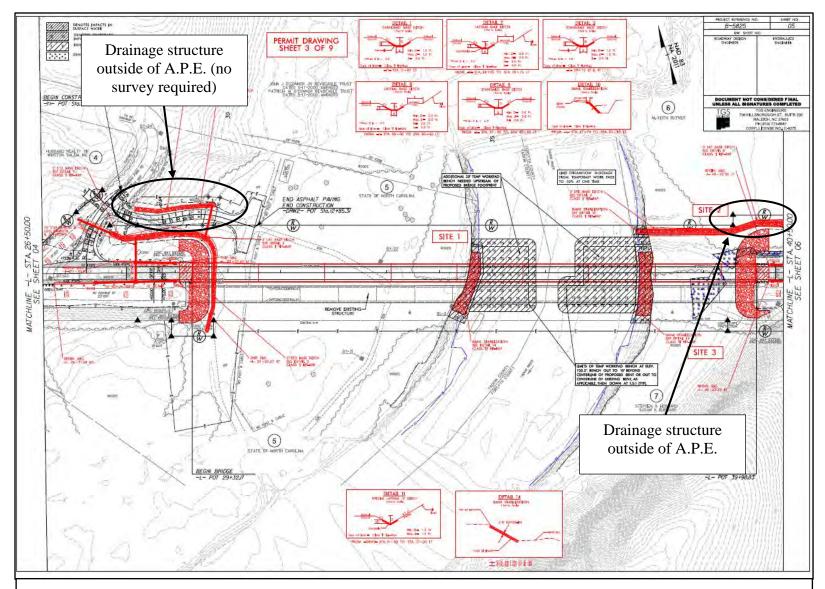


Figure 4: July 2019 permit drawings showing proposed drainage structures for the west end of Bridge 35.

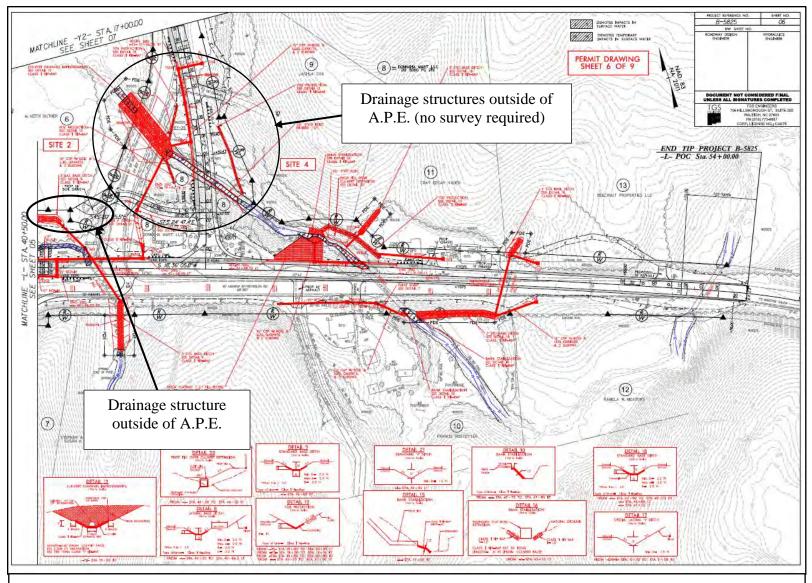


Figure 5: July 2019 permit drawings showing proposed drainage structures for the east end of Bridge 35.

The A.P.E. in the northeast quadrant includes a floodplain along the north side of the bridge in the western portion and the base of a ridge in the eastern portion. Modern land use activities have greatly impacted this area. NC 67 is built up high above the floodplain landform, creating an embankment which is vegetated with mixed hardwoods. A low-lying area is directly north of the embankment and bridge. The 2016 archaeological survey consisted of the examination of nine shovel test (ST) locations in the quadrant (see Figure 3 above). STs 1-3 were excavated in the floodplain along the north side of the bridge. The STs in the floodplain exposed varied soil profiles consisting of two soil strata. The first stratum ranged from dark yellowish brown loamy clay to very dark grayish brown silty clay to a depth of up to 35 cm (14 in.). The second stratum was strong brown clay or loamy clay or dark red clay. Dense gravel characterized the second stratum in the ST 3 soil profile. No artifacts were recovered from this quadrant.

The permit drawings in Figures 4-5 (above) show an unnamed tributary stream runs along the north side of the bridge. This tributary accounts for the "low lying area" described in the 2017 survey report. However, an agricultural field is located along the north side of the tributary stream. The proposed drainage structure will impact a small portion of the field that was not included in the 2017 archaeological survey. This landform is a well drained floodplain along the Yadkin River, a location with a moderate to high potential for archaeological sites (Figure 6).

Background research conducted during the 2017 survey found this part of the A.P.E. is included in the previously recorded Yadkin River Archaeological District (Higgins et al. 1991). The district encompasses a 26-kilometer (16.5-mile) long stretch of floodplain along the Yadkin River in Forsyth County and includes 44 archaeological sites and six fish weirs in the Yadkin River. It has been recommended eligible for the National Register of Historic Places (NRHP) and placed on the Study List. Any prehistoric archaeological sites found in the district could have potential to contribute to our knowledge of the Late Woodland phase of prehistory in this region.

The archaeological survey was conducted by NCDOT Division 11 Environmental Officer Kevin Hinings and NCDOT Archaeologist Caleb Smith on 12/15/2020. A total of 10 STs were excavated (Figure 7). The STs were placed at a 15-meter (50-ft.) interval in two parallel transects located 15 meters (50 ft.) apart. The first transect (STs 1-5) was located approximately 50 meters (164 ft.) north of Bridge 35 and 20 meters (66 ft.) west of SR 1600. The transect was located in a fallow agricultural field along the north side of the small tributary that runs along the north side of the bridge (Figures 8-9). The landform is slightly higher ground than the tributary, and slopes gradually downhill from SR 1600 west towards the Yadkin River. The first transect was approximately 30 meters (100-ft.) north of the STs (1-3) excavated during the 2016 survey. The second transect (STs 6-10) was located approximately 15 meters (50 ft.) north of the first (Figure 10). None of the STs contained any artifacts. Table 1 describes each ST.

The soil in the shovel tests was consistently a 30-40 cm (12-16 in.) thick layer of brown silty loam over strong brown clay loam. In general, the clay content of the soil increased in the lower levels. The gravel/rock content varied, but in general the tests on the higher ground had a denser gravel content. Several large cobbles were located on the surface of the plowed field along the east end of the transects. The shovel tests were excavated on what appeared to be well drained land, although the soil in some was wetter than others. The wet conditions may have been the result of heavy rains during the previous days.

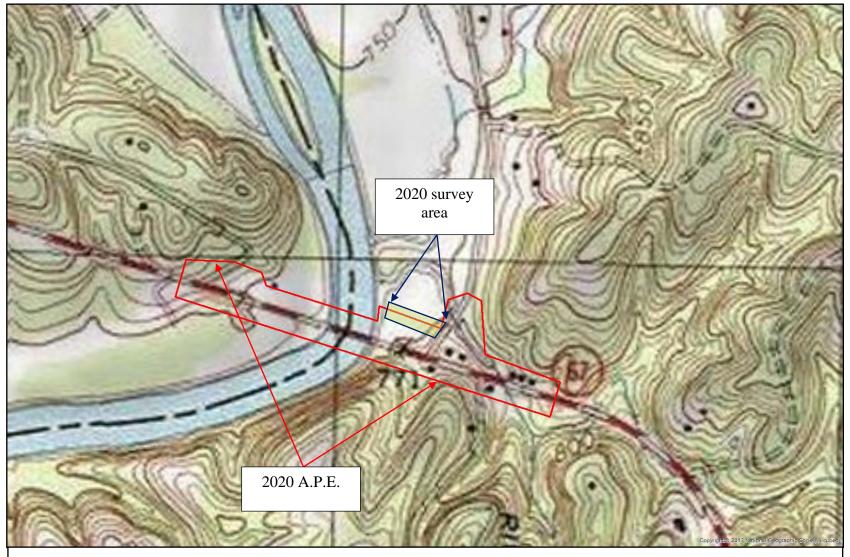


Figure 6: Topographic map of the 2020 A.P.E. for Yadkin Bridge 35 (USGS Vienna, N.C. 1:24,000-scale topographic map).

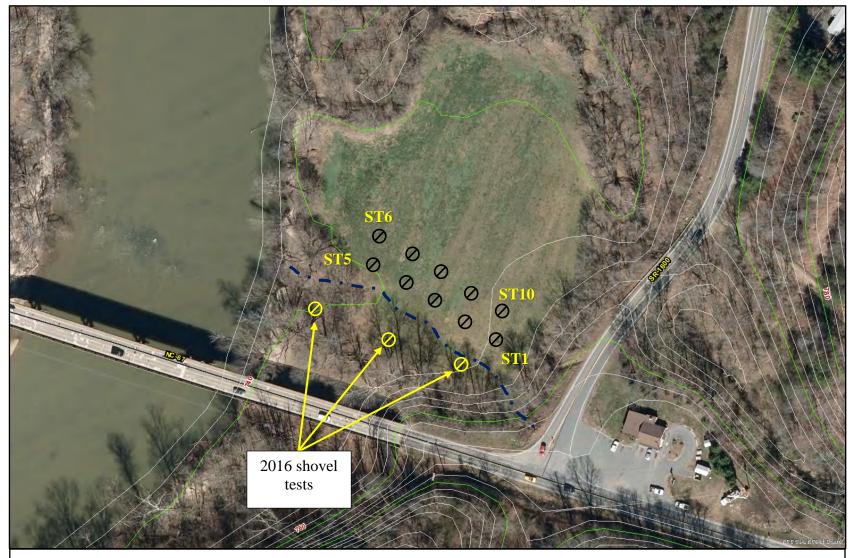


Figure 7: Aerial photograph showing the locations of the shovel tests excavated in 2016 (yellow) and 2020 (black).

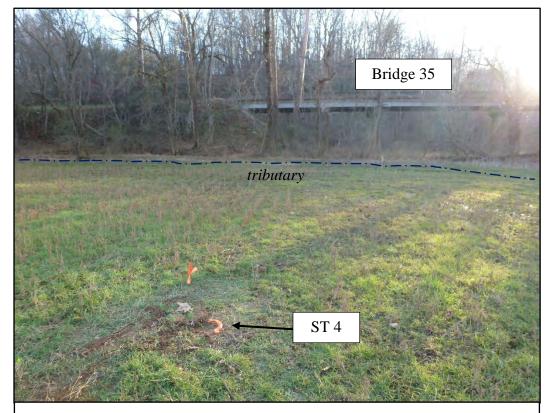


Figure 8: South view of shovel test 4.

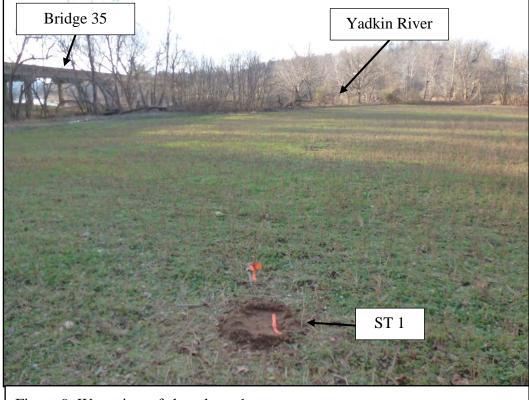


Figure 9: West view of shovel test 1.

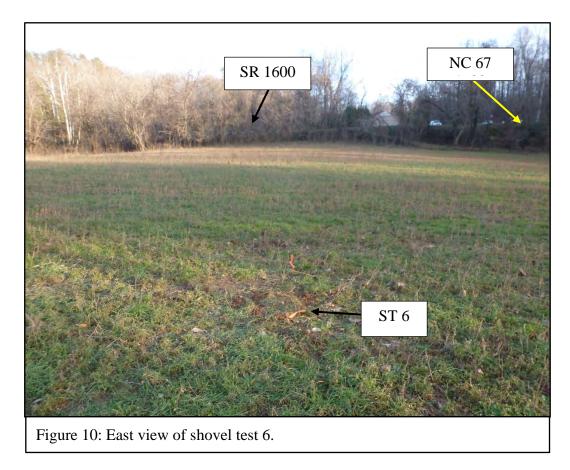


Table 1: Description of Shovel Tests in the Northeast Quadrant

| Shovel | Description                                                                                               |
|--------|-----------------------------------------------------------------------------------------------------------|
| Test   |                                                                                                           |
| 1      | 0-25 cm (0-10 in.) 7.5 YR 4/3 (brown) silty loam; 25-40 cm (10-16 in.) 7.5YR 4/6 (strong brown) clay loam |
| 2      | 0-20 cm (0-8 in.) 7.5YR 4/3 (brown) silty clay; 20-40 cm. (8-16 in.) 7.5YR 5/6 (strong brown) clay loam   |
| 3      | 0-30 cm (0-12 in.) 7.5YR 4/3 (brown) silty clay; 30-50 cm (12-20 in.) 7.5YR 4/6 (strong brown) clay loam  |
| 4      | 0-55 cm (0-22 in.) 7.5YR 4/3 (brown) clay loam                                                            |
| 5      | 0-63 cm (0-25 in.) 7.5YR 4/6 (strong brown) silty loam                                                    |
| 6      | 0-50 cm (0-20 in.) 7.5YR 4/6 (strong brown) silty clay                                                    |
| 7      | 0-38 cm (0-15 in.) 7.5YR 4/3 (brown) silty loam; 38-58 cm (15-23 in.) 7.5YR 4/4 (brown) silty loam        |
| 8      | 0-25 cm (0-10 in.) 7.5YR 4/3 (brown) silty loam; 25-50 cm (10-20 in.) 7.5YR 3/3 (dark brown) silty clay   |
| 9      | 0-22 cm (0-9 in.) 7.5YR 4/6 (strong brown) silty loam; 22-34 cm (9-13 in.) 7.5YR 5/6 (strong brown) clay  |
|        | loam                                                                                                      |
| 10     | 0-28 cm (0-11 in.) 7.5YR 4/4 (brown) silty loam; 28-40 cm (11-16 in.) 7.5YR 5/6 (strong brown) clay loam  |

In conclusion, the archaeological survey of the expanded A.P.E. in the northeast quadrant of the Yadkin Bridge 35 replacement project did not identify any archaeological sites. The 2016 archaeological survey for the bridge replacement (Brilliant 2017) did not identify any sites, either. Therefore, no additional work is recommended for this project.

#### **References Cited**

#### Brilliant, Brooke

Archaeological Survey for the Proposed Replacement of Bridge No. 35 on NC 67 (Reynolda Rd.) over the Yadkin River in Yadkin and Forsyth Counties, North Carolina (NCDOT TIP B-5825; PA 16-01-0080). Submitted to the North Carolina Department of Transportation, Raleigh. Archaeological Consultants of the Carolinas, Inc., Clayton, North Carolina. *No National Register of Historic Places Eligible Sites Present* form on file at the N.C. Department of Transportation and the N.C. Office of State Archaeology, Raleigh.

#### Higgins, Melissa, Rhea J. Rogers, and J. Ned Woodall

1991 Yadkin River Archaeological District National Register of Historic Places Registration Form. Form submitted to the U.S. Department of the Interior, National Park Service, Washington, D.C. Wake Forest University Archaeology Labs, Winston-Salem, North Carolina.

#### Smith, Caleb

- 2016 Archaeological Survey Required form, Replace Bridge 35 on NC 67 (Reynolda Rd.) over the Yadkin River in Yadkin and Forsyth Counties, North Carolina. N.C. Department of Transportation, Raleigh. Form submitted on March 11, 2016.
- 2017 No National Register of Historic Places Eligible Sites Present form, Replace Bridge 35 on NC 67 (Reynolda Rd.) over the Yadkin River in Yadkin and Forsyth Counties, North Carolina. N.C. Department of Transportation, Raleigh. Form submitted on January 4, 2017.